

# CONSTRUCTION AND DEVELOPMENT OF SHALLOW SALINE HABITAT AT THE SALTON SEA

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## OBJECTIVES

- CONSTRUCT A 4-CELLED WETLAND USING BLENDED WATER FROM THE SALTON SEA AND ALAMO RIVER
- EVALUATE CONSTRUCTION TECHNIQUES FOR LEVEE AND ISLAND BUILDING
- EVALUATE DURABILITY OF LEVEES AND ISLANDS CONSTRUCTED WITH LOCAL SEDIMENT/SOILS
- EVALUATE WATER, SEDIMENTS, AND AQUATIC INVERTEBRATE RESPONSE TO BLENDED WATER IN SHALLOW HABITAT
- EVALUATE BIRD USE, INCLUDING NUMERICAL ABUNDANCE, SPECIES DIVERSITY, NESTING AND RECRUITMENT



## EVALUATE WATER, SEDIMENTS, AND AQUATIC INVERTEBRATE RESPONSE TO BLENDED WATER IN SHALLOW HABITAT

- NUTRIENTS
- CONTAMINANTS
- PESTICIDES
- SALINITY

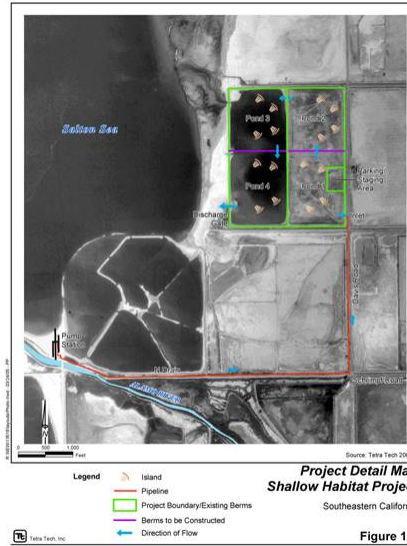


## EVALUATE BIRD USE, INCLUDING NUMERICAL ABUNDANCE, SPECIES DIVERSITY, NESTING AND RECRUITMENT

- COMPARE TO SAN DIEGO  
SALT PONDS
- COMPARE TO FRESHWATER  
SITES NEARBY
- EVALUATE SPECIES  
COLONIZATION OF SITE
- EVALUATE NEST FATE
- EVALUATE POST-HATCH  
SURVIVAL
- EGG ANALYSIS FOR  
CONTAMINANTS AND  
PESTICIDES



## SITE SELECTION AND DEVELOPMENT



## CONSTRUCTION (JANUARY 2006)



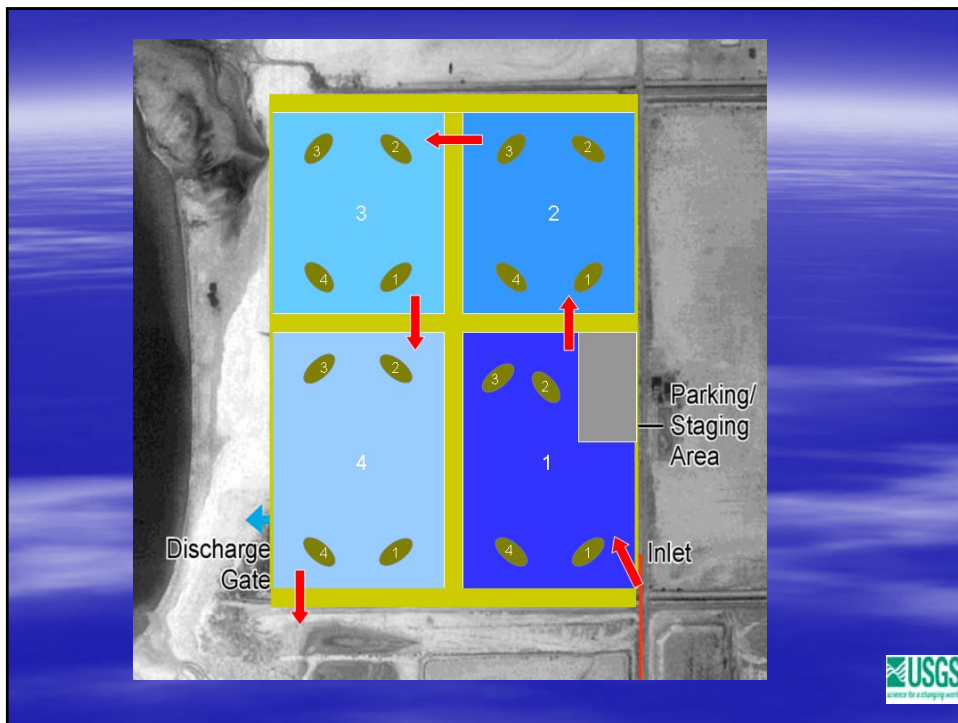
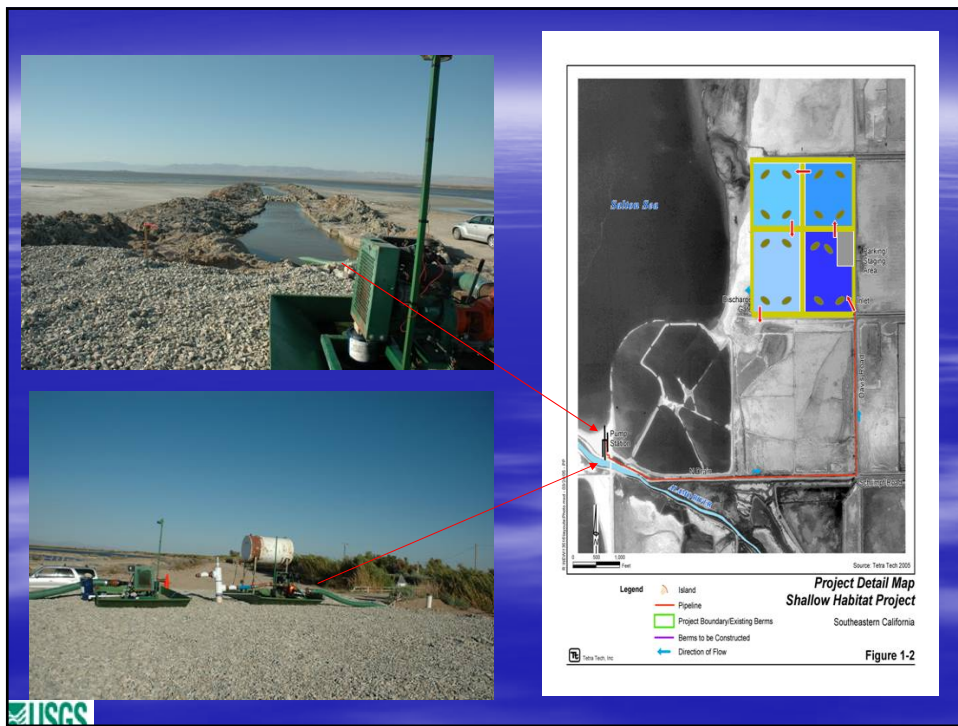
## CONSTRUCTION (JANUARY 2006)



## CONSTRUCTION (JANUARY 2006)





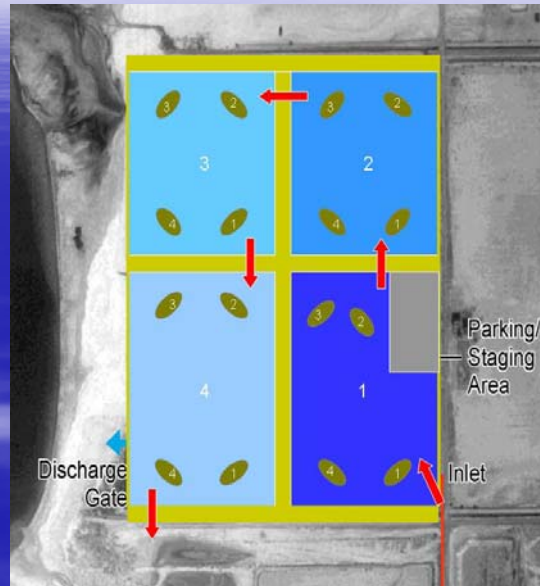


WATER TO CELL 1 BEGAN  
LAST WEEK IN APRIL 2006

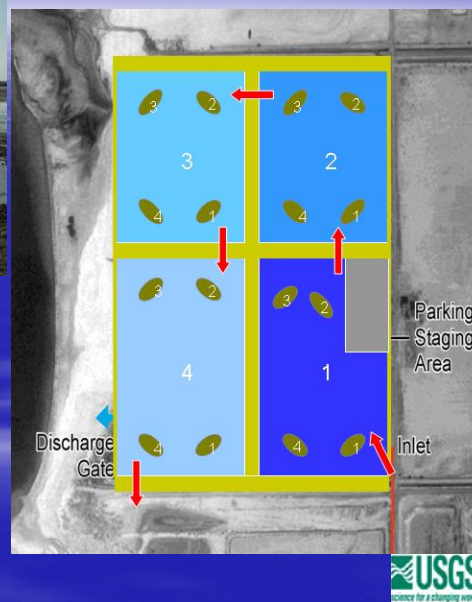
NEEDED TO ESTABLISH  
SALINITY GRADIENT OF  
ROUGHLY 20 PPT IN CELL 1  
AND 60 PPT IN CELL 4

THIS SALINITY REGIME  
REQUIRES THAT CELLS 1 AND  
2 ARE DEEP FLOODED  
INITIALLY WITH 2/3 SALTON  
SEA WATER, THEN MOVING  
WATER INTO 3 AND 4.

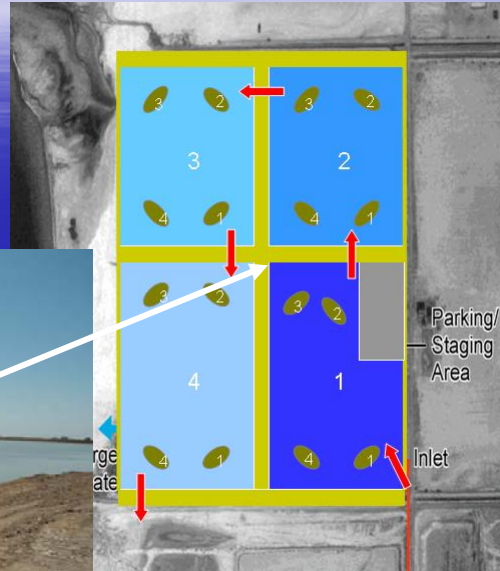
LOWER SALINITY IN CELL 1  
AND 2 IS THEN ACHIEVED BY  
USING MOSTLY RIVER WATER



#### WATER DELIVERY TO CELL 1 4/26/06



CELL 1 FLOODING 5/11/06



WATER DELIVERY TO CELL 1 4/26/06

FIRST NEST BLACK-NECKED STILT  
5/03/06 CELL 1 ISLAND 3

